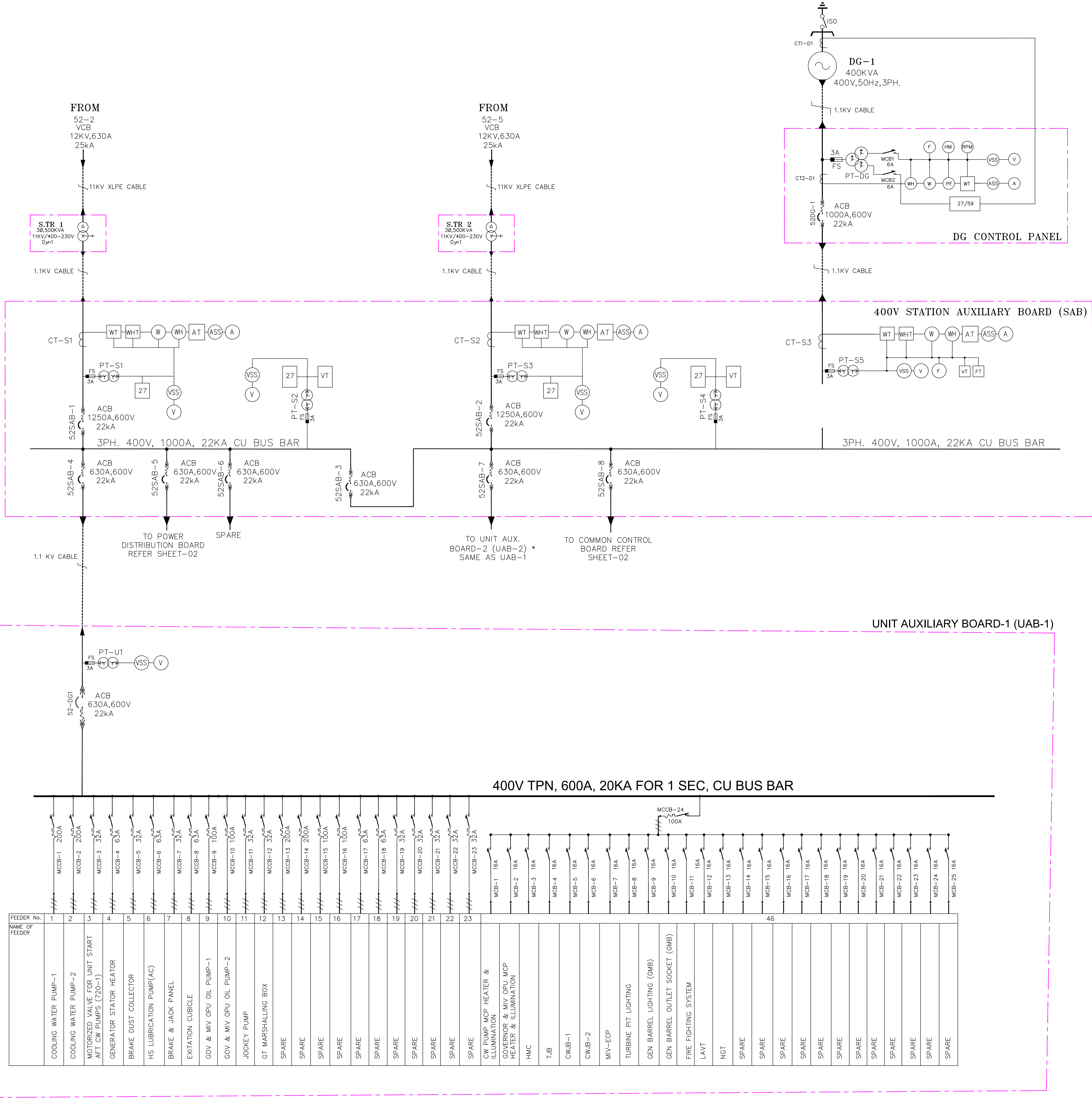


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SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	AIR CIRCUIT BREAKER (ACB)		INDICATING METER
	MOULDED CASE CIRCUIT BREAKER (MCCB)		TRANSducer / MULTI FUNCTION TRANSducer
	MINIATURE CIRCUIT BREAKER (MCB)		RELAY
	DRAW-OUT TERMINAL		FUSE
			TRANSFORMER
			GENERATOR
			CURRENT TRANSFORMER
			LINE POTENTIAL TRANSFORMER

LEGENDS :-

LEGEND	DESCRIPTION
A	AMMETER
ASS	AMMETER SELECTOR SWITCH
AT	CURRENT TRANSducer
V	VOLTMETER
VSS	VOLTMETER SELECTOR SWITCH
W	WATT METER
WH	WATT HOUR METER
FS	FUSE
CT	CURRENT TRANSFORMER
PT	POTENTIAL TRANSFORMER
ACB	AIR CIRCUIT BREAKER
MCB	MINIATURE CIRCUIT BREAKER
MCCB	MOULDED CASE CIRCUIT BREAKER
VT	VOLTMETER TRANSducer
WT	WATT TRANSducer
WHT	WATT HOUR TRANSducer

PROTECTION RELAYS-DEVICE FUNCTION

DEVICE NO.	FUNCTION
27	UNDER VOLTAGE PROTECTION
50/51	INST. & IDMT O/C PROTECTION
59	OVER-VOLTAGE PROTECTION

CT DETAILS:-

NO.	CIRCUIT	RATIO	ACC. CLASS	BURDEN VA	KNEE POINT VOLTAGE V _{kp} (V)	MAG. CURRENT I _m A	PHYSICAL LOCATION
SAB CTs							
CT-S1	SAB INCOMER-1 METERING	800/5A	1.0	30VA	-	-	SAB
CT-S2	SAB INCOMER-2 METERING	800/5A	1.0	30VA	-	-	SAB
CT-S3	SAB DG INCOMER METERING	800/5A	1.0	30VA	-	-	SAB
PDB CTs							
CT-PDB	PDB INCOMER METERING	800/5A	1.0	30VA	-	-	PDB
AC PANEL CTs							
CT-AC	AC PANEL INCOMER METERING	800/5A	1.0	30VA	-	-	AC PANEL

PT DETAILS :-

NO.	CIRCUIT	QTY/ UNIT	RATIO V/V	ACCURACY CLASS	BURDEN VA	PHASE	PHYSICAL LOCATION
SAB PTs							
PT-S1	SAB INCOMER-1 METERING AND PROTECTION	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	SAB
PT-S2	SAB BUS-1 METERING AND PROTECTION	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	SAB
PT-S3	SAB INCOMER-2 METERING AND PROTECTION	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	SAB
PT-S4	SAB BUS-2 METERING AND PROTECTION	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	SAB
PT-S5	SAB DG INCOMER METERING AND PROTECTION	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	SAB
UAB PTs							
PT-U1	UAB-1 INCOMER METERING	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	UAB-1
PT-U2	UAB-2 INCOMER METERING	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	UAB-2
DG CONTROL PANEL PTs							
PT-DG	DG CONTROL PANEL METERING AND PROTECTION	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	3P/1.0	50	1PH	DGCP
CCB PTs							
PT-CCB	CCB INCOMER METERING	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	CCB
PDB PTs							
PT-PDB	PDB INCOMER METERING	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	PDB
AC PANEL PTs							
PT-AC	AC PANEL INCOMER METERING & PROTECTION	3	$\frac{400}{\sqrt{3}} / \frac{110}{\sqrt{3}}$	1.0	50	1PH	AC PANEL

RAGHUGANGA HYDROPOWER LIMITED

CONSULTANT
WAPCOS LIMITED

BHARAT HEAVY ELECTRICALS LTD.
BHOPAL, INDIA
(A GOVT OF INDIA UNDERTAKING)

NAME	SIGN	DATE
PREPARED: NARESH	LM	26.09.2020
CHECKED: PS		26.09.2020
APPROVED: RMP		26.09.2020

REV.	DATE	ALTERED	-	
-	-	CHECKED	-	
-	-	APPROVED	-	
PROJECT 2 x 20 MW - RAHUGAT HYDROELECTRIC PROJECT, NEPAL				
DEPT. TITLE HPE SINGLE LINE DIAGRAM CODE 415 400V SWITCHGEAR FOR POWERHOUSE				
DWG. NO. 1 2900073003				REV. 00
SHEET 01 OF 02				